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ABSTRACT

The present invention provides a tissue culture method for cultivation of marine algae, said method comprising the steps of (i) establishing axenic viable algal material by sequential treatment thereof in sterile sea water supplemented with domestic liquid detergent, incubating the treated material, (ii) culturing the axenic explants on agarified medium for induction of callus; (iii) excising and subculturing the calli from the axenic explants on fresh agar plates to obtain differentiated densely pigmented oval or spherical shaped micro-propagules (iv) subculturing the pigmented calli in agarified medium to achieve enhanced somatic embryogenesis and micro-propagule formation in pigmented filamentous callus, (v) transferring the filamentous calli with somatic embryos for morphogenesis and development of young plantlets; and (vi) cultivating algal biomass on a large scale by growing the young plantlets in enclosed perforated polythene bags.